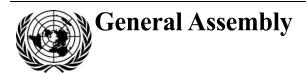
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# Progress on the renovation of the North Building at the Economic Commission for Latin America and the Caribbean in Santiago

Ninth report of the Advisory Committee on Administrative and Budgetary Questions on the proposed programme budget for 2023

### I. Introduction

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- 1. The Advisory Committee on Administrative and Budgetary Questions has considered the report of the Secretary-General on progress on the renovation of the North Building at the Economic Commission for Latin America and the Caribbean (ECLAC) in Santiago (A/77/315). During its consideration of the report, the Committee met with representatives of the Secretary-General, who provided additional information and clarification, concluding with written responses dated 12 October 2022.
- 2. The renovation of the North Building is one of the near-term major construction projects identified in the report of the Secretary-General on the strategic capital review (A/72/393). Following the earthquake in Chile in 2010, ECLAC concluded in its seismic resistance assessment of the compound's buildings that the North Building, constructed as a temporary structure in 1989, was in need of mitigation measures. The fourth progress report of the Secretary-General (A/77/315), submitted pursuant to General Assembly resolution 76/246 A, section XVI, provides information on progress made since the previous reports of the Secretary-General on the subject.

<sup>&</sup>lt;sup>1</sup> The Advisory Committee provided related observations and recommendations in its report on the strategic capital review (A/72/7/Add.9). The Committee has addressed a number of specific matters in its previous reports on the ECLAC renovation project (A/76/7/Add.11, A/75/7/Add.11, A/74/330, A/73/457 and A/72/7/Add.8).





## II. Progress on the implementation of the project

### Collaboration with the host country Government and other Member States

- 3. The Advisory Committee recalls that a host country agreement between ECLAC and the Government of Chile was signed in February 1948, providing for privileges and immunities, including exemptions from local taxes and import duties, for entitled staff and for official purposes, as well as, inter alia, for construction materials, equipment and infrastructure materials. The Committee also recalls that the host country has provided significant support for United Nations operations in Chile and specifically for the ECLAC compound, with the land for the construction and expansion of the ECLAC compound donated by the Government of Chile in 1960 and 1997, respectively (A/76/7/Add.11, para. 3).
- 4. The Secretary-General indicates that the host country has provided technical support from the building information modelling ("Plan BIM") project on the implementation of the building information modelling methodology, information management and the compilation of technical documents during the design and construction phases, which was incorporated into the rebidding exercise, using a multistage request for proposals methodology Through its "Construye 2025" programme, the host country has provided technical support with respect to the definition of guidelines for the development of a plan for reusing, recycling or otherwise deriving value from disassembled building components, which has been developed by the lead consulting firm (A/77/315, para. 23). The Advisory Committee recalls that, since 2009, all buildings in the ECLAC compound have been modelled according to building information modelling technology, which uses threedimensional models and simulations for engineering, architectural and refurbishment projects, and for cost control and structural assessments, and that the host country has been providing technical support on the implementation of the building information modelling methodology (A/76/7/Add.11, para. 3).
- 5. The Advisory Committee expresses its gratitude to the host country for its continued support to ECLAC and trusts that the Secretary-General will continue to engage with the host country to ensure the success of the project. Furthermore, the Committee encourages the Secretary-General to also continue to engage with other Member States to seek voluntary contributions, including in-kind contributions, and other forms of support for the project.

### **Project governance**

6. Information on project governance and management is provided in the report of the Secretary-General (A/77/315, paras. 6–10). The project owner remains the Executive Secretary of ECLAC, supported by a Project Executive and a project management team, and a stakeholders committee that includes staff with disabilities. Coordination continues with the Global Asset Management Policy Service at Headquarters, which remains actively involved in overseeing the project, with an emphasis on risk management and alignment with lessons learned (see also A/76/7/Add.11, para. 5). The Advisory Committee continues to stress the importance of close coordination between ECLAC and the Secretariat in New York, in particular the Global Asset Management Policy Service, to ensure proper oversight and governance in all aspects of the project.

### **Project staffing**

7. Information on project staffing is provided in the report of the Secretary-General (A/77/315, paras. 11–12). The ECLAC project management and support team comprises one Project Manager (National Professional Officer), two Project

Assistants (Local Level), and one Project Coordinator (P-3), in the Global Asset Management Policy Service at New York Headquarters, as well as one temporary Procurement Officer (P-3). It is indicated that the recruitment of the Project Coordinator, to be cost-shared with the United Nations Office at Nairobi (75 per cent) and ECLAC (25 per cent) has been delayed in order to limit any cost overruns in view of the current project status and is planned to be filled after the awarding of the general contract in 2023 (see also A/76/7/Add.11, para. 7). All other positions are encumbered. Upon enquiry, the Advisory Committee was informed that the Procurement Officer's duty station is Santiago. The incumbent of the position was onboarded in July 2022 and the position is proposed for continuation from January to the end of April 2023, as it is required in support of the multistage request for proposals exercise, which would conclude at that time (see para. 8 below).

### **Project schedule**

- 8. Information on the overall project schedule is provided in the report of the Secretary-General (A/77/315, paras. 52–56). It is indicated that owing to the unsuccessful first tendering exercise (see also para. 20 below), the construction phase has been delayed by 12 months. It is also indicated that the contract award for the retendering of the general construction contract through a multistage request for proposals process with a competitive dialogue is expected by April 2023. It is indicated that the updated schedule, as illustrated in figure III and table 3 of the report of the Secretary-General, reflects an 18-month period for the construction works, with expected completion in October 2024 and final commissioning in December 2024, compared with December 2023, which reflects a 12-month shift compared with the original schedule. It is also indicated that, in order to mitigate further delays, the closeout stage would commence while construction works are under way and that the closeout schedule would be updated after the awarded contractor's schedule is confirmed.
- 9. Upon enquiry, the Advisory Committee was informed that the projected milestones during the construction phase were as follows:
  - (a) May 2023 (month 1 of construction): construction commences;
  - (b) February 2024 (month 10): commissioning of main civil works;
  - (c) April 2024 (month 12): commissioning of interior works;
- (d) June 2024 (month 14): commissioning of electrical works, incorporating the input of the photovoltaic plant into the electrical and building management systems;
- (e) August 2024 (month 16): pre-commissioning of general construction works;
- (f) August to October 2024 (months 16 to 18): the final months of construction will be used to perform final cleaning works and the moving in and installation of items such as furniture, blinds and information technology equipment. By month 16, installations should be operational, with only minor works to be completed at that stage;
- (g) Upon certification by ECLAC of substantial completion, the building will be considered ready for occupancy.
- 10. The Advisory Committee expresses concern at the one-year project completion delay with construction to commence in April 2023 and end in October 2024, instead of March 2022 to September 2023, and trusts that no further delays will be forthcoming.

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11. The Advisory Committee notes that, as previously requested (see A/76/7/Add.11, para. 9), the project schedule has been presented as a Gantt chart, as well as in tabular form, and trusts that this practice will continue in future ECLAC progress reports, as well as in the progress reports of other United Nations construction projects in order to ensure the standardization of the reporting format for all projects.

### Planning and design

12. Information on planning and design activities is provided in the report of the Secretary-General (A/77/315, paras. 35–44). The Advisory Committee recalls that the design phase concluded on schedule in December 2020 (ibid., table 3 and A/76/7/Add.11, para. 12). The Committee notes that the Secretary-General indicates that, in an effort to contain costs, the lead consulting firm and the project management team have defined a list of construction items subject to value engineering for compliant alternatives to be included within the scope and discussed with bidders during the multistage request for proposals process. It is also indicated that other previously decided elements would remain valid, for example, measures to mitigate seismic and pandemic risks, energy efficiency specifications, the integration of the architecture and engineering designs informed by building information modelling, the execution of logistics and on-site safety and security plans, the workplace design criteria and strategy, the implementation of a comprehensive inclusion strategy for people with disabilities, and the development of a reuse and recovery plan to minimize the environmental impact of waste (see also A/76/7/Add.11, para. 12). Upon enquiry, the Committee was informed that a comprehensive inclusion strategy for persons with disabilities had been included in the architectural design, in compliance with international and local standards, Furthermore, CEPALDIS, the ECLAC working group on the disability inclusion strategy, proposed to improve the visibility of exterior ramps. The proposal has already been addressed by the lead consultancy firm through appropriate design adjustments and without cost implications (see also A/76/323, paras. 47–49). The Advisory Committee trusts that accommodations to ensure accessibility for persons of all abilities will continue to be incorporated into the design and looks forward to continued updates on design and planning activities, and any changes, in future progress reports.

### Risk management

13. The first quantitative analysis of risks (Monte Carlo simulation)<sup>2</sup> was generated in 2019 and showed that at the United Nations benchmark "P80" level,<sup>3</sup> the project was expected to come in at approximately \$14.9 million, or \$0.6 million over budget, with a confidence level of 30 per cent (A/75/7/Add.11, para. 9). The fourth and most recent Monte Carlo analysis, conducted in May 2022, concluded that the confidence level had decreased to 14 per cent, and that the project was expected to come in at approximately \$15.4 million, or \$1.1 million over budget. The Secretary-General indicates that throughout the reporting period, the project management team continued to take proactive measures to manage the risks and reviewed lessons learned to be applied during the retendering process through the implementation of a multistage bidding process with a competitive dialogue (A/77/315, paras. 16–17, see also paras. 19–25 below). **The Advisory Committee notes the significant decrease** 

<sup>&</sup>lt;sup>2</sup> A Monte Carlo simulation is a statistical analysis method used to better understand the impact of risks in a project, by using a range of minimum to maximum values with regard to time frames and cost estimates for stages and components, through a computer-based simulation that runs multiple random project scenarios (see A/76/7/Add.11, para. 15 (footnote)).

<sup>&</sup>lt;sup>3</sup> The "P80" benchmark is a target confidence level that the project cost will not exceed the total cost 80 per cent of the time.

in the confidence level, from 30 per cent in 2019 to 14 per cent in 2022, as well as the efforts of the ECLAC project management team to take proactive measures to manage risks. The Committee trusts that the Secretary-General will continue to closely monitor and mitigate project risks to ensure the delivery of the project within the scope, budget and timeline, as approved by the General Assembly.

14. Information on project risk management is provided in the report of the Secretary-General (ibid., para. 21). A comparison of the top five ECLAC project risks from 2019 to 2022 is summarized in the table below.

# Comparison of the top five Economic Commission for Latin America and the Caribbean project risks, 2019–2022

Top five risks in 2019 (A/74/330, para. 28)	Top five risks in 2020 (A/75/347, para. 24)	Top five risks in 2021 (A/76/323, para. 17)	Top five risks in 2022 (A/77/315, para. 21)
1. Owner-directed changes (late design requirements and optional scope additions)	1. Schedule delay in the start of construction owing to the COVID-19 pandemic	Schedule delay     (pre-construction phase)	1. Escalation of construction costs
2. Interior renovations	2. Owner-directed changes (late design requirements and optional scope additions)	2. Owner-directed scope changes	2. Repairs to existing foundations and basement
3. Consultancy	3. Schedule delay relating to the availability of materials	3. Cost increases (availability of materials)	3. Force majeure or seismic event
4. Schedule delays	4. Labour strike	4. Schedule delay (unavailability of materials due to COVID-19)	4. Solar shading structure
5. Cost escalation	5. Seismic event	5. Seismic event	5. Global events

- 15. The Advisory Committee notes that, as previously requested (see A/76/7/Add.11, para. 17), the ECLAC risks have been shown in a comparative table and trusts that this practice will continue in future ECLAC progress reports, as well as in the progress reports on other United Nations construction projects in order to ensure the standardization of the reporting format for all projects.
- 16. Regarding risk 1, escalation of construction costs, the Advisory Committee was informed, upon enquiry, that this particular risk currently had the highest potential to affect the cost plan owing to global factors beyond the control of the Secretariat, such as supply chain disruptions and escalating costs of construction services, in combination with the delays during the resolicitation of the general construction services, which might increase the risk that the actual price of the contract might exceed the cost estimate. The main mitigation measure would involve awarding lump-sum contracts for the required services as soon as possible, thereby transferring the risk to the contractor, and working closely with the contractor on cost-saving measures such as ordering required goods as soon as possible to avoid further inflationary pressures on those orders.

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- 17. Regarding risk 3, force majeure or seismic event, the Advisory Committee was informed, upon enquiry, that ECLAC had assessed possible events and included related insurance clauses as part of the construction contract, based on various risk assumptions in the case of a seismic event, as follows: (a) major injury to workforce and staff; (b) damage to the location and the construction site; (c) damage to temporary swing space accommodations; (d) cutting of roads and streets; (e) damage to manufacturer's facilities and delivery routes; (f) overdemand for certain construction materials owing to the country's reconstruction processes; (g) delays to the import schedule; and (h) damage to the water supply network, utility network, communications and sewerage. The Advisory Committee recalls that it has previously stressed that the seismic stability of the underground garage structure should be monitored closely, and reiterates its recommendation that updates on the status of the three-level underground garage will be provided in all progress reports (see A/75/7/Add.11, paras. 18–19).
- 18. Regarding risk 4, solar shading structure, the Advisory Committee was informed, upon enquiry, that there was a potential of escalating costs for supporting structural elements. The refined design foresees that the perimeter structure carries both the solar shading and photovoltaic installations, and that the new structure is now designed as an independent exoskeleton covering the building, making both the building and the independent structure more resilient to potential seismic events. The actual costs for photovoltaic panels had decreased since the 2019 cost estimate and would therefore offset the increased cost estimate for the steel structure.

### Procurement and use of local materials and knowledge

19. Information on procurement activities and the use of local materials and knowledge are described in the report of the Secretary-General (A/77/315, paras. 24–31).

#### Procurement activities

- 20. The Secretary-General indicates that the initial request for proposals for the general construction contract was issued on 21 July 2021, but that only one company had presented a proposal by the submission deadline of 13 October 2021. A new tendering process, namely a multistage request for proposals approach, was subsequently initiated and is currently under way, with a submission deadline of 4 November 2022. Compared with the previous tendering exercise, the multistage request for proposals exercise includes new elements, such as: (a) the inclusion of a probity monitor consultant to oversee the solicitation process up to the recommendation of award stage in 2022; (b) dedicated procurement personnel; and (c) an expression of interest with pre-qualification.
- 21. As indicated in annex I to the report of the Secretary-General, the cost for a probity monitor, as well as for a site technical inspection, under consultancy, would amount to \$208,100. Upon enquiry, the Advisory Committee was informed that the United Nations Procurement Manual indicates that a probity monitor may be included during a multistage request for proposals exercise in order to oversee the competitive dialogue process and to ensure transparency and fair competition among the submitting bidders. A probity monitor would act as an observer, without decision-making authority, and as an independent party who does not report to procurement, the requisitioning office or another United Nations office.
- 22. Regarding the aforementioned lessons learned in response to the initial unsuccessful procurement exercise, the Advisory Committee was informed, upon enquiry, that the procurement process, in the form of a multistage request for proposals exercise, had been adjusted accordingly, as follows: (a) implementation of a flexible proposal and use of construction bonds, incorporating alternative insurance

- methods; (b) acceptance of a broad scope of quality and environmental certifications; (c) organization of competitive dialogues and interactions in order to support bidders; (d) establishment of payment conditions for the delivery of completed partial stages; and (e) inclusion of contractual clauses to address inflation. The Advisory Committee notes that the renewed procurement process will now proceed in the form of a multistage request for proposals exercise and requests that further information thereon, specifically on the advantages and disadvantages of this process, will be presented in the next progress report. The Committee trusts that an update on the status of the implementation of the multistage requests for proposals exercise will be presented to the General Assembly at the time of its consideration of the present report.
- 23. As indicated in the report of the Secretary-General, as part of the recommended advance purchases to mitigate delays during the construction process, six complementary tenders are being carried forward:
- (a) Workstations and furniture, with one shipment expected to be delivered to the ECLAC compound by September 2022 and a second shipment scheduled for the second half of 2023. Upon enquiry, the Advisory Committee was informed that a systems contract was utilized for the purchase of workstations and furniture;
- (b) Heating, ventilation and air conditioning components, with an expected contract award in November 2022, and the equipment to be delivered and then stored until installation;
- (c) Solar photovoltaic plant components, with a contract awarded in May 2022 to a Chilean solar engineering company, and the equipment delivered and to be stored until installation. The instalment commissioning stages, which represent 20 per cent of the cost of the contract, will be scheduled according to the final construction schedule. Upon enquiry, the Advisory Committee was informed that the related contract costs amounted to \$282,998, or 12.8 per cent above the estimated amount of \$250,000, as a result of inflation and shipping costs;
- (d) Wastewater treatment plant and its components, following a postponement to allow for inclusion in the scope of the parameters for compliance with the ECLAC general water management plan, for a holistic strategy aimed at reducing water consumption in response to the worsening drought situation in Chile (see also paras. 26–27 below). The updated tendering process was launched in May 2022, with expected contract award in September 2022;
- (e) Site technical inspection, for an independent firm to perform construction administration, inspection and validation of executed works, and to provide certification, with the contract award expected in December 2022;
- (f) Additional swing space amenities, with a refurbishment contract awarded in August 2022. The Advisory Committee was informed, upon enquiry, that the contract costs amounted to \$415,300, or 18.7 per cent above the cost estimate of \$350,000.
- 24. The Advisory Committee trusts that an update on the status of all procurement activities, information on the cost-effectiveness of advance purchases and details of the measures taken to address the deterioration over time of stored material components, will be provided to the General Assembly at the time of its consideration of the present report, and in the next progress report.

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### Local materials and knowledge

25. The Secretary-General indicates that the project management team continues to work closely with the Procurement Unit in ECLAC regarding the direct local purchase of various systems as a means of reducing costs and administrative fees (A/77/315, para. 17). It is also indicated that the competitive dialogue of the multistage request for proposals tendering process will allow participating companies to submit value engineering interim proposals, and that alternatives considering locally sourced materials and the empowerment of local industry will be favourably received and technically evaluated by the lead consulting firm and the project management team (ibid., para. 31). The Advisory Committee was informed, upon enquiry, that the procurement by ECLAC of heating, ventilation and air conditioning precision equipment available locally through small and medium-sized companies was deemed to provide the best value. The Committee was also informed, upon enquiry, that ECLAC has sought support through local cooperation with Mujeres en Construcción de la Pontificia Universidad Católica (Chilean association of women in construction), and that the association is providing ECLAC with support on best practices regarding construction. The Advisory Committee continues to emphasize the importance of ensuring the integration of locally sourced and manufactured materials, as well as local labour and expertise, and trusts that updates thereon will continue to be provided in the next progress reports.

### Sustainability, energy-efficient construction and related cost savings

- 26. Information on the ECLAC project's energy efficiency strategy is included in the report of the Secretary-General (ibid., paras. 45–47). The Advisory Committee recalls that the renovated ECLAC North Building will be a sustainable and energyefficient, net-zero building, including a photovoltaic plant (972 solar panels) to be located on the roof of the North Building, resulting in increased energy efficiency in the annual operation of the building. The Committee also recalls that the energy produced would not be stored, since batteries for the storage of electricity are not a cost-effective or environmentally responsible solution (see also A/76/323, para. 21–23). As part of the updated energy efficiency strategy, the design for the photovoltaic plant will result in an increase of 19 per cent in annual energy production over the initial estimates (A/77/315, para. 45). Upon enquiry, the Committee was informed that the renovated ECLAC North Building would direct 48 per cent of the energy produced directly into that Building; 49 per cent to the ECLAC internal electrical grid; and 3 per cent to the external grid. In addition, the integration of the aforementioned wastewater technology into the ECLAC water management plan would have no impact on estimated costs but would result in a positive environmental impact (see para. 23 (d) above). The Advisory Committee recalls that the estimation of energy to be produced has varied since the inception of the project in 2018 and trusts that, as the construction phase commences, the projected amount of energy to be produced will become more defined. The Committee looks forward to continued updates in future progress reports on the annual energy to be produced, used and redirected by the North Building's photovoltaic plant (see also A/76/7/Add.11, para. 21, A/75/7/Add.11, para. 21 and A/74/7/Add.11, paras. 18-20).
- 27. The Advisory Committee reiterates that best practices and applicable lessons learned in all aspects of the project, including the ECLAC energy efficiency strategy, should be shared with and among all United Nations construction projects (see also A/76/7/Add.11, para. 23 and A/75/7/Add.11, para. 23).

## III. Project expenditures and anticipated costs

- 28. Information on project expenditures and anticipated costs is provided in the report of the Secretary-General (A/77/315, paras. 57–61 and annex I). The ECLAC renovation project continues to be recorded under a multi-year construction-in-progress account, approved by the General Assembly in resolution 73/279 A, whereby funding does not expire at the end of a financial period and, upon the completion of the project, expenditures are to be reported, with any unused amounts to be returned to Member States.
- 29. The Secretary-General indicates that the overall cost of the project has remained unchanged at \$14,330,200. Furthermore, a projected cumulative unused balance of \$5,766,200 would remain at the end of 2022. The net funding requirement for 2023 would amount to \$640,400 comprising projected expenditures of \$6,406,600 less the aforementioned projected unused balance from 2022. The projected expenditures comprise the following:
- (a) An amount of \$306,600 under section 21, Economic and social development in Latin America and the Caribbean, for the continuation of the project management team (1 National Professional Officer and 2 Local level positions) and the continuation of the temporary position of Procurement Officer (P-3) for four months (January to April 2023), as well as for 25 per cent of the cost of one Project Coordinator (P-3) at Headquarters for eight months (May to December 2023), shared with the project to replace blocks A–J at the United Nations Office at Nairobi;
- (b) An amount of \$6,100,000 under section 33, Construction, alteration, improvement and major maintenance, for professional services, including related to procurement, as well as resources for construction, construction supervision, the independent risk management firm, travel costs, escalation costs and the provision of contingency. After finalization of the multistage request for proposals tendering process, more accurate estimates would be presented in the next progress report.
- 30. The Advisory Committee notes that the revised cost plan, as presented in annex I, presents the annual projected expenditures for the duration of the project but considers that the inclusion of a separate table, with columns showing the original cost estimate and the revised cost estimates for each year thereafter would be a helpful tool for Member States in their consideration of the report overall. The Committee therefore recommends that the General Assembly request the Secretary-General to include such a table showing the evolution of the project cost plan in future ECLAC progress reports, as well as in the future reports of all other United Nations construction projects. The Committee looks forward to an update in the next progress report on the cost plan, if any, after completion of the multistage request for proposals tendering process.
- 31. Regarding escalation, the revised cost plan indicates that a total amount of \$1,657,000 was projected for the life of the project, and that an amount of \$900,300 would be expended in 2023 and an amount of \$756,700 in 2024. Upon enquiry, the Advisory Committee was informed that escalation was established as a flat rate at the beginning of the project, and that an average of 4.935 per cent was used, calculated on the basis of the average construction cost escalation between May 2007 and May 2017 published by the Chilean Construction Chamber, and the average annual inflation between January 2007 and January 2017 published by the Central Bank of Chile. The Advisory Committee notes the current impact of inflation and supply chain challenges on the overall cost of the project, and trusts that the Secretary-General will continue to monitor the appropriateness of the currently established average escalation level and provide updates thereon in the next progress report.

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### Contingency

32. The Secretary-General indicates that the first expenditure from the total contingency amount of \$1,091,300 has been earmarked in the amount of \$65,300 and pertains to the swing space. The balance of the contingency would then amount \$1,026,000 (A/77/315, annex III). The Advisory Committee trusts that an update on the use of the contingency will be provided in future progress reports.

### IV. Conclusion

- 33. The recommendations of the Secretary-General on proposed actions to be taken by the General Assembly are presented in paragraph 63 of his report. Subject to its recommendations and observations above, the Advisory Committee recommends that the General Assembly:
  - (a) Take note of the report of the Secretary-General;
- (b) Approve the continuation of the temporary position of Procurement Officer (P-3) for the period from January to April 2023;
- (c) Appropriate an amount of \$640,400 for the project in 2023, comprising \$24,800 under section 21, Economic and social development in Latin America and the Caribbean, and \$615,600 under section 33, Construction, alteration, improvement and major maintenance, of the proposed programme budget for 2023, which would represent a charge against the contingency fund.